

# Microsoft Excel

## Intermediate

## Demonstrations

## and

## Exercises

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## Demonstration 1 – Working with Large Worksheets

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Explain and demonstrate to the learners how to work with large worksheets as stipulated below.

1. Open the data file provided called '**Excel Worksheets Demo1.xlsx**' and get all the learners to locate and open this file also.
2. Demonstrate how to create **Groups and Outlines** by using the **Auto Outline** feature, getting the learners to carry out this task at the same time as you.
3. Demonstrate how to collapse and expand the outline, getting the learners to carry out this task at the same time as you.
4. Demonstrate how to clear the **Group and Outline** from the worksheet, getting the learners to carry out this task at the same time as you.
5. Demonstrate how to **Freeze** the first column and first row using the **Freeze Panes** feature, getting the learners to carry out this task at the same time as you.
6. Demonstrate how to **Unfreeze** the first column and first row using the **Unfreeze Panes** feature, getting the learners to carry out this task at the same time as you.

## **Exercise 1 – Working with Large Worksheets**

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Using the instructions stipulated below, complete the following exercise so that after the completion of the exercise you will have practised all the features of entering and editing data.

1. Open the data file provided called '**Excel Worksheets Ex1.xlsx**'.
2. Create **Groups and Outlines** by using the **Auto Outline** feature.
3. Collapse and expand the outline.
4. Clear the **Group and Outline** from the worksheet.
5. **Freeze** the first column and first row using the **Freeze Panes** feature.
6. **Unfreeze** the first column and the first row using the **Unfreeze Panes** feature.

## **Demonstration 2 – Using 3-D Formula and Linking**

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Explain and demonstrate to the learners the how to create 3-D formula using multiple worksheets and how create a link from one spreadsheet to another.

1. Open the data file provided called '**Excel 3D Formula Demo1.xlsx**' and get all the learners to locate and open this file also.
2. Demonstrate how to enter a **3D** formula into cell **A11** that adds the **Qtr1** and **Qtr2** totals for year **2018** and **2019** by typing the formula in manually, getting the learners to carry out this task at the same time as you.
3. Demonstrate how to enter a **3D** formula into cell **A11** that adds the **Qtr1** and **Qtr2** totals for year **2018** and **2019** by using the **Sum** function, getting the learners to carry out this task at the same time as you.
4. Open the data file provided called '**Excel Linking Demo1.xlsx**' and get all the learners to locate and open this file also.
5. Demonstrate how to select the spreadsheet, **Copy** it, and **Paste Link** it into **Sheet 2**, getting the learners to carry out this task at the same time as you.

## Exercise 2 – Using 3-D Formula and Linking

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Using the instructions stipulated below, complete the following exercise so that after completion of the exercise you will have practised using a range of 3D formula and be familiar how to link spreadsheets.

1. Open the data file provided called '**Excel 3D Formula Ex1.xlsx**' and get all the learners to locate and open this file also.
2. Enter a **3D** formula into cell **A11** that adds the **Qtr1** and **Qtr2** totals for year **2018** and **2019** by typing the formula in manually.
3. Enter a **3D** formula into cell **A11** that adds the **Qtr1** and **Qtr2** totals for year **2018** and **2019** by using the **Sum** function.
4. Open the data file provided called '**Excel Linking Ex1.xlsx**'.
5. Select the spreadsheet **Copy** it and **Paste Link** it into **Sheet 2**.

## Demonstration 3 – Conditional Formula and Formatting

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Explain and demonstrate to the learners the how to create conditional formula and how to apply conditional formatting to a cell or range of cells.

1. Open the data file provided called '**Excel Conditional Demo1.xlsx**' and get all the learners to locate and open this file also.
2. Demonstrate, in cell **B4**, how to use the conditional **IF** function to evaluate whether the **Sales** figure in cell **B2** is greater than the **Costs** figure in cell **B3**. If it is, display the word **Yes**, if not, display the word **No**, getting the learners to carry out this task at the same time as you.
3. Demonstrate, using **Conditional Formatting**, how to show the text in cell **B4** in red if the value of the cell is **Yes**, and green if the value of the cell is **No**, getting the learners to carry out this task at the same time as you.

## Exercise 3 – Conditional Formula and Formatting

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Using the instructions stipulated below, complete the following exercise so that after completion of the exercise you will have practised using conditional formula and be familiar how to apply conditional formatting to a spreadsheet.

1. Open the data file provided called '**Excel Conditional Ex1.xlsx**' and get all the learners to locate and open this file also.
2. In cell **B4**, how to use the conditional **IF** function to evaluate whether the **Sales** figure in cell **B2** is greater than the **Costs** figure in cell **B3**. If it is, display the word **Higher**, if not, display the word **Lower**.
3. Using **Conditional Formatting**, how to show the text in cell **B4** in blue if the value of the cell is **Yes**, and orange if the value of the cell is **No**.



## Demonstration 4 – Working with Tables

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Explain and demonstrate to the learners how to work with large multiple as stipulated below.

1. Open the data file provided called '**Excel Filters Demo1.xlsx**' and get all the learners to locate and open this file also.
2. Demonstrate how to apply **Filters** to the table, getting the learners to carry out this task at the same time as you.
3. Demonstrate how to filter the table by **Salesperson** so that only shows the records for **Sue** and **David**, getting the learners to carry out this task at the same time as you.
4. Demonstrate how to remove the filters, getting the learners to carry out this task at the same time as you.
5. Demonstrate how to filter the table by **Qty** so that only shows the records that are greater than 10, getting the learners to carry out this task at the same time as you.
6. Demonstrate how to remove the filter, getting the learners to carry out this task at the same time as you.
7. Demonstrate how to **Sort** the table by **Product** in ascending sequence, getting the learners to carry out this task at the same time as you.
8. Demonstrate how to apply **Subtotals** to the table **Subtotal** at each change in **Product**, summing the **Qty** field, getting the learners to carry out this task at the same time as you.
9. Demonstrate how to remove the **Subtotal**, getting the learners to carry out this task at the same time as you.

## Exercise 4 – Working with Tables

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Using the instructions stipulated below, complete the following exercise so that after completion of the exercise you will have practised the filtering and sub-totalling features.

1. Open the data file provided called '**Excel Filters Ex1.xlsx**' and get all the learners to locate and open this file also.
2. Apply **Filters** to the table.
3. Filter the table by **Salesperson** so that only shows the records for **Eric** and **George**.
4. Remove the filters.
5. Filter the table by **Qty** so that only shows the records that are greater than 20.
6. Remove the filters.
7. **Sort** the table by **Salesperson** in ascending sequence.
8. Apply **Subtotals** to the table **Subtotal** at each change in **Salesperson**, summing the **Qty** field.
9. Remove the **Subtotal**.

## Demonstration 5 – Worksheet Data Validation

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Explain and demonstrate to the learners how an Excel worksheet and workbook data can be validated on input.

1. Open the data file provided called '**Excel Validation Demo1.xlsx**' and get all the learners to locate and open this file also.
2. Demonstrate how to add **Data Validation** to all cells except the first in column **A** so that only dates can be input into these cells, getting the learners to carry out this task at the same time as you.
3. Demonstrate how to add a **Data Validation Input Message** and **Error Alert** to all cells except the first in column **A** so that an error message appears if anything but a date is input into these cells, getting the learners to carry out this task at the same time as you.
4. Demonstrate how to test the **Data Validation**, getting the learners to carry out this task at the same time as you.

## Exercise 5 – Worksheet Data Validation

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Using the instructions stipulated below, complete the following exercise so that after completion of the exercise you will have practised using worksheet validation.

1. Open the data file provided called '**Excel Validation Ex1.xlsx**' and get all the learners to locate and open this file also.
2. Add **Data Validation** to all cells except the first in column **A** so that only dates can be input into these cells.
3. Add a **Data Validation Input Message** and **Error Alert** to all cells except the first in column **A** so that an error message appears if anything but a date is input into these cells.
4. Test the **Data Validation** to ensure it works.

## Demonstration 6 – Worksheet and Workbook Protection

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Explain and demonstrate to the learners how an Excel worksheet and workbooks can be protected in different ways.

5. Open the data file provided called '**Excel Protection Demo1.xlsx**' and get all the learners to locate and open this file also.
6. Demonstrate how to **Protect** the entire **Workbook**, getting the learners to carry out this task at the same time as you.
7. Demonstrate how to **Unprotect** the **Workbook**, getting the learners to carry out this task at the same time as you.
8. Demonstrate how to **Unlock** cells **B3** to **M8** inclusive so that they can be edited, then protect the **Worksheet** so that all the other cells are protected beside these, getting the learners to carry out this task at the same time as you.
9. Demonstrate how to **Unprotect** the **Workbook**, getting the learners to carry out this task at the same time as you.

## **Exercise 6 – Worksheet and Workbook Protection**

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Using the instructions stipulated below, complete the following exercise so that after completion of the exercise you will have practised using worksheet and workbook protection.

1. Open the data file provided called '**Excel Protection Ex1.xlsx**' and get all the learners to locate and open this file also.
2. **Protect** the entire **Workbook**.
3. **Unprotect** the **Workbook**.
4. **Unlock** cells **B3** to **M8** inclusive so that they can be edited, then protect the **Worksheet** so that all the other cells are protected beside these.
5. **Unprotect** the **Worksheet**.